

REMARKS

Applicants seek reconsideration of the application. No claims have been canceled, six claims have been added and no claims have been amended. Accordingly, Claims 1-13 and 18-23 are pending.

I. 35 U.S.C. § 112

In the Office Action, the Examiner rejects Claim 7 under 35 U.S.C. § 112, second paragraph for various informalities. These matters are believed to be addressed by the amendment submitted herewith. It is therefore respectfully submitted that the rejection under U.S.C. § 112 be withdrawn.

II. 35 U.S.C. § 102

Claims 1-5 and 7-11 are rejected under 35 U.S.C. § 102(b) as anticipated by Jang et al. (U.S. Patent No. 5,840,624). Applicants respectfully traverse this rejection.

It is axiomatic that to anticipate a claim, every element of the claim must be disclosed within a single reference. Thus, if even one feature of Claim 1 and/or Claim 8 is not found in Jang, Applicants respectfully request that the rejection of Claim 1 and/or Claim 8 under 35 U.S.C. § 102 as being anticipated by Jang be withdrawn.

Claim 1 requires introducing a dielectric layer comprising a plurality of different material layers over a substrate between interconnecting line and a contact point on the substrate. As noted in the patent application, one problem associated with the conventional photoimaging technique is the formation of undesired openings in the photoimageable material due to substrate reflections of light. In one respect, by introducing a dielectric layer comprising a plurality of different material layers over a substrate between an interconnection line and a contact point on the substrate, as claimed in Claim 1, undesired substrate reflections of light are suppressed and thereby

inhibiting formation of undesired openings in the photoimageable material due to substrate reflections of light.

Claim 8 requires introducing a dielectric layer comprising a plurality of alternating material layers over a substrate between an interconnection line and the substrate. In one respect, by introducing a dielectric layer comprising a plurality of alternating material layers over a substrate between an interconnection line and the substrate, undesired substrate reflections of light are suppressed.

In rejecting Claims 1 and 8, the Examiner asserts that “Jang shows the method as claimed in figures 5-8 and corresponding text, with dielectric layers 8, 19 and 23 and etch stop layer 20.” However, figures 5-8 and corresponding text of Jang do not teach or suggest introducing a dielectric layer over a substrate between an interconnection line and a contact point on the substrate in which the dielectric layer comprises a plurality of different material layers and patterning an interconnection to the contact point, as set forth in Claim 1. Additionally, Applicants respectfully submit that there is nothing in Jang that teaches or suggests a dielectric layer comprising a plurality of alternating material layers, as set forth in Claim 8. Instead, Jang discloses a MOSFET device comprising dielectric layers 8, 19 and 23 that are constructed of the same material (i.e., silicon oxide). Thus, Applicants respectfully request that the rejection of Claims 1 and 8 and their respective dependent claims be withdrawn.

With respect to Claim 3, the claimed method requires that the introducing the dielectric layer comprises introducing a plurality of alternating material layers. As noted above, Jang does not teach or suggest a dielectric layer comprising a plurality of alternating material layers. Accordingly, Applicants respectfully request that the rejection of Claim 3 be withdrawn.

With respect to Claims 4 and 5, Applicants respectfully submit that the Examiner has not carried the burden of presenting a prima facie case of §102 rejections by failing to point out where the claimed features of Claims 4 and 5 are found within Jang. In the Office Action dated June 19, 2002, the Examiner merely asserts that “Jang shows the method as claimed in figures 5-8 and corresponding text, and dielectric layers 8, 19 and 23 and etch stop layer 20” without pointing out where features claimed in Claim 4 (i.e., introducing the dielectric layer comprises introducing silicon dioxide as the ultimate layer) and Claim 5 (i.e., introducing a plurality of alternating material layers comprises alternating silicon dioxide layers with at least one other material layers) are found in Jang. In this regard, Applicants respectfully request that the Examiner specifically identify where the alleged teachings could be found in Jang.

In view of the foregoing, Applicants submit that Claims 1, 3-5 and 8 are not anticipated by Jang and requests withdrawal of the rejection of Claims 1, 3-5 and 8. Dependent Claims 2, 7 and 9-11 are submitted as not being anticipated by Jang at least for the reasons given in support of their base claims.

III. 35 U.S.C. § 103

Claims 6 and 12-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jang in view of Andideh et al. (U.S. Patent No. 6,362,091). Applicants respectfully traverse this rejection.

With respect to Claims 6 and 12-13, Applicants incorporate the prior argument with respect to their base Claims 1 and 8. At least for this reason, Applicants submit that Claims 6 and 12-13 are not obvious over Jang in view of Andideh.

IV. New Claims

Applicants respectfully submit that the New Claims 18-23 are supported by the original disclosure. With respect to New Claims 18-23, Applicants incorporate the prior arguments with respect to their base Claims 1 and 8.

With respect to New Claim 18, Applicants respectfully submit that Jang fails to disclose introducing a photoimageable material layer, wherein the dielectric layer comprising the plurality of different material layers is introduced between the substrate and the photoimageable material layer.

With respect to New Claim 19, Applicants respectfully submit that Jang fails to disclose introducing an etch stop layer between the substrate and the dielectric layer comprising the plurality of different material layers.

With respect to New Claim 20, Applicants respectfully submit that Jang fails to disclose introducing a dielectric layer comprising the plurality of different material layers between an etch stop layer and a photoimageable material layer.

With respect to New Claim 21, Applicants respectfully submit that Jang fails to disclose introducing a photoimageable material layer, wherein the dielectric layer comprising the plurality of alternating material layers is introduced between the substrate and the photoimageable material layer.

With respect to New Claim 22, Applicants respectfully submit that Jang fails to disclose introducing an etch stop layer between the substrate and the dielectric layer comprising the plurality of alternating material layers.

With respect to New Claim 23, Applicants respectfully submit that Jang fails to disclose introducing a dielectric layer comprising the plurality of

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

The claims have been amended as follows:

7. (Amended) The method of claim 1, wherein the dielectric layer comprises a first dielectric layer, the method further comprising introducing a second dielectric layer between the first dielectric layer and [the] an etch stop layer.

New claims 18-23 have been added.